

## WHAT IS CLAIMED IS::

1. A presentation supporting system that inputs an image signal, processes the input image signal, and outputs the processed  
5 image signal to a display device, said presentation supporting system comprising:

a shooting device that takes a color image;

a data input generation module that inputs the color image taken by the shooting device as analog data and converts the input  
10 analog data into digital data expressed in an RGB color space to generate RGB image data;

a data processing module that compresses the generated RGB image data to G-R/B image data of a compressed data volume by elimination of an R component and B component among R, G, and B  
15 components included in the RGB image data of each pixel, with regard to every other pixels in a main scanning direction of the image;

a storage module that has a data bus of a predetermined bus width and temporarily stores the compressed G-R/B image data via the data bus;

20 a data conversion module that reads the G-R/B image data from said storage module and interpolates the eliminated R component and B component, so as to convert the G-R/B image data into reproduced RGB image data including all the R, G, and B components with regard to each pixel; and

25 a data output module that outputs the reproduced RGB image data to the display device.

2. A presentation supporting system in accordance with claim 1,

wherein the predetermined bus width is  $(3+n)$ -th power of 2 bits, where  $n$  is an integer of not less than 1,

each of the R, G, and B components included in the RGB image data and in the G-R/B image data with regard to each pixel is  
5 expressed as 8-bit data,

the G-R/B image data is 16-bit image data in a minimum read-write unit, and

said data conversion module receives and transmits the 16-bit image data in units of  $(n-1)$ -th power of 2 from and to said storage  
10 module via the data bus of the predetermined bus width.

3. An image processing method adopted in a presentation supporting system that inputs an image signal from a shooting device that takes a color image, processes the input image signal, and outputs  
15 the processed image signal to a display device, said image processing method comprising the steps of:

inputting the color image taken by the shooting device as analog data and converting the input analog data into digital data expressed in an RGB color space to generate RGB image data;

20 compressing the generated RGB image data to G-R/B image data of a compressed data volume by elimination of an R component and B component among R, G, and B components included in the RGB image data of each pixel, with regard to every other pixels in a main scanning direction of the image;

25 temporarily storing the compressed G-R/B image data via a data bus of a predetermined bus width;

reading the G-R/B image data from the storage and interpolating the eliminated R component and B component, so as to

convert the G-R/B image data into reproduced RGB image data including all the R, G, and B components with regard to each pixel; and outputting the reproduced RGB image data to the display device.

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